

PATENT ABSTRACTS OF JAPAN

(11)Publication number :

64-028952

(43)Date of publication of application : 31.01.1989

(51)Int. Cl.

H01L 27/14

H01L 23/02

(21)Application number : 62-185911

(71)Applicant : NEC CORP

(22)Date of filing : 24.07.1987

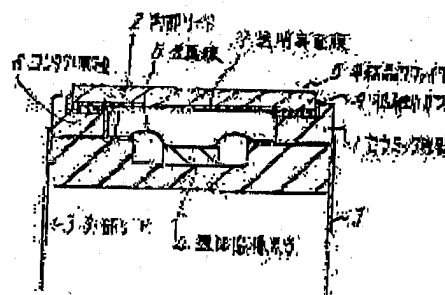
(72)Inventor : SUGAWARA KENJI

(54) SOLID-STATE IMAGE SENSING DEVICE

(57) Abstract:

PURPOSE: To prevent an electrostatic breakdown of a solid-state image sensing device by a method wherein a transparent conductive film is formed on the surface of a transparent cap of the solid-state image sensing device or a cap composed of transparent semiconductor glass is used and this is connected electrically to an external lead in order to prevent an electric charge from being accumulated on the surface of the cap.

CONSTITUTION: A solid-state image sensing element 4 is mounted on an element-mounting part of a package where an inner lead 2 pierces a wall of a ceramic container 1 and an external lead 3 installed at the outside of the ceramic container 1 is connected; an electrode of the solid-state image sensing element 4 is connected electrically to the inner lead 2 by using a metal wire 5. A transparent cap 8 composed of single-crystal sapphire installed on the surface of a transparent conductive film 7 composed of SnO_2 , CdO , In_2O_3 , Bi_2O_3 or the like whose conductivity is $10^{-5} \sim 10^{-3} \Omega^{-1}\text{cm}^{-1}$ by a reactive sputtering method or a vacuum evaporation method is mounted on an upper end of the ceramic container 1 while a contact electrode 6 installed by being connected electrically to the external lead 3 is connected to the transparent conductive film 7; the ceramic container 1 is sealed by using low-melting-point glass.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]